| Written Description | Draw and label the base. <br> Draw the bottom of one of <br> the slices. |
| :--- | :--- |


| Draw one slice and label its | Write the integral for the |
| :--- | :--- | dimensions. volume.



$h=\sqrt{(2 y)^{2}-y^{2}}=\sqrt{3} \quad y=\sqrt{3\left(4-x^{2}\right)}$

$$
\int_{-2}^{2} \frac{1}{2}\left(2 \sqrt{4-x^{2}}\right)\left(\sqrt{3\left(4-x^{2}\right)}\right) d x
$$

dius 2 centered about the origin. The cross sections perpendicular to the $x$-axis are equilateral triangles.

The base is a square, one of whose sides is the interval $[-2,2]$ along the $x$-axis. The cross sections perpendicular to the $x$-axis are rectangles of height $f(x)=$ $-x^{2}+4$.

The base is the region enclosed by $y=x^{2}$ and $y=3$. The cross sections perpendicular to the $y$-axis are squares.

The base is the parabolic region $x=y^{2}$ and $x=$ 3. The cross sections perpendicular to the $x$-axis are right isosceles triangles whose leg lies in the region.

